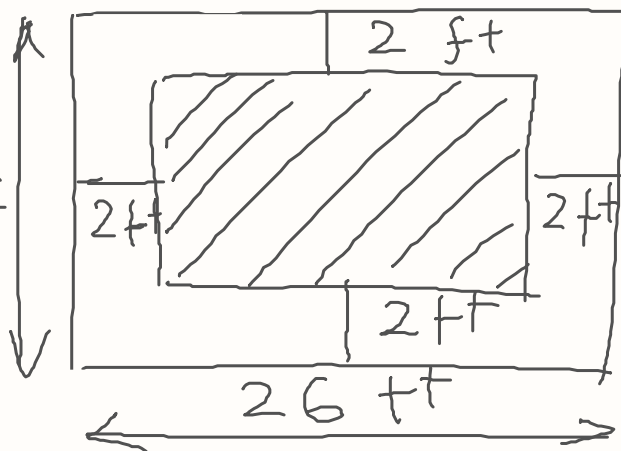


GEOM. REV. PART 4

31



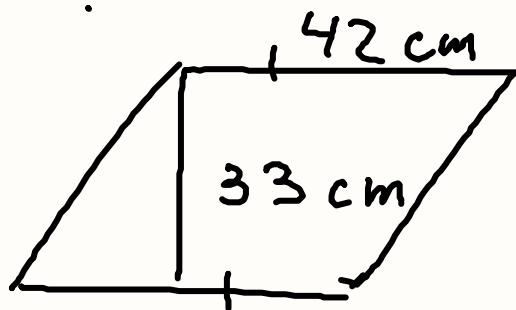
FIND THE AREA
OF THE SHADED
REGION

$$l = 26 - 2 - 2 = 22 \text{ ft}$$

$$b = 12 - 2 - 2 = 8 \text{ ft}$$

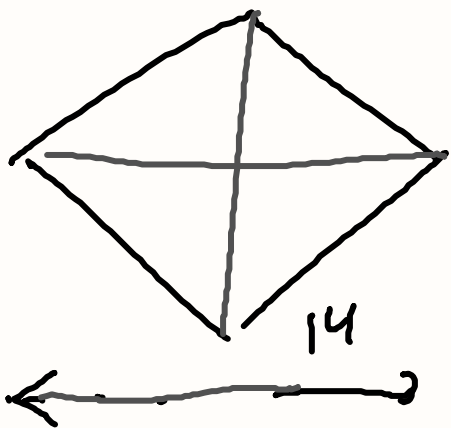
$$A = l \cdot b = 22 \cdot 8 = 176 \text{ ft}^2$$

32.



$$A = b \cdot h = 42 \cdot 33 = 1386 \text{ cm}^2$$

33.

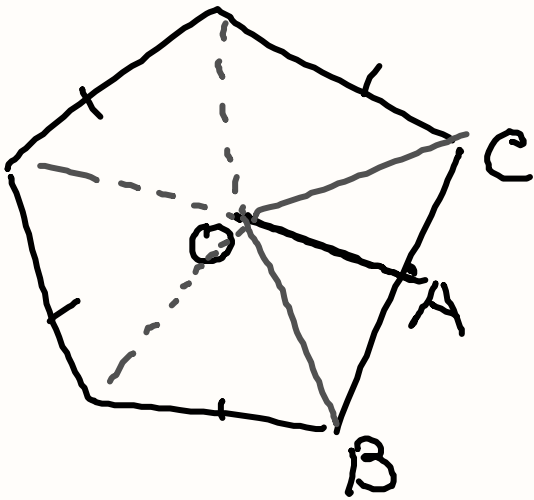


RHOMBUS

$$D_1 = 8 \quad D_2 = 14$$

$$A = \frac{D_1 \cdot D_2}{2} = \frac{8 \cdot 14}{2} = 56$$

34.



REGULAR PENTAGON

$$OA - \text{APOTHEM} = 1.4 \text{ m}$$

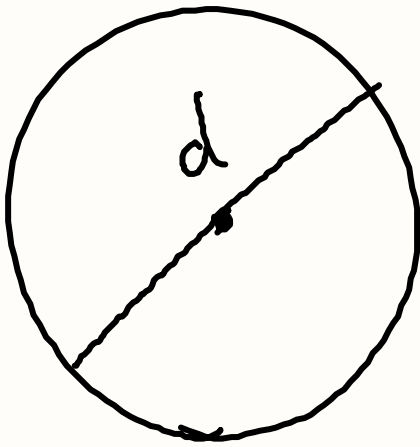
$$BC = 2 \text{ m}$$

$$A = ?$$

$$A_{\Delta} = \frac{1.4 \cdot 2}{2} = 1.4 \text{ m}^2$$

$$A = 5 \cdot A_{\Delta} = 5 \cdot 1.4 = 7 \text{ m}^2$$

35.



$$A = 50\pi \text{ cm}^2$$

$D = ?$

$$A = \pi R^2$$

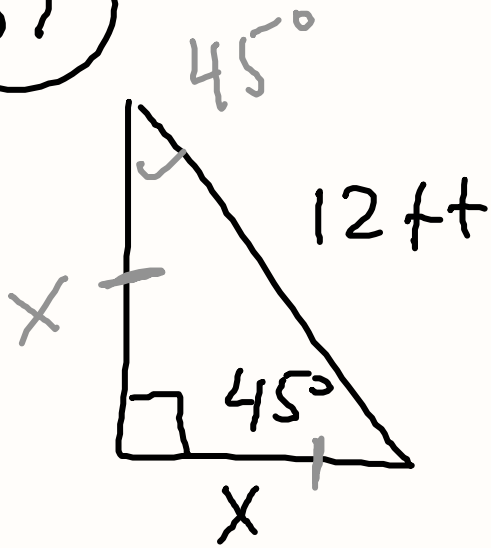
$$R^2 = \frac{A}{\pi} = \frac{50\pi}{\pi} =$$

$$= 50$$

$$R = \sqrt{50} = 7.07$$

$$d = 2R = 2 \cdot 7.07 = 14.14 \text{ cm}$$

(37)



$$x^2 + x^2 = 12^2$$

$$2x^2 = 144$$

$$x^2 = 72$$

$$x = \sqrt{72} =$$

$$= \sqrt{36 \cdot 2} =$$

$$= \sqrt{36} \sqrt{2} = 6\sqrt{2}\text{ ft}$$

38. $(-1, 3); (0, 4)$

DISTANCE?

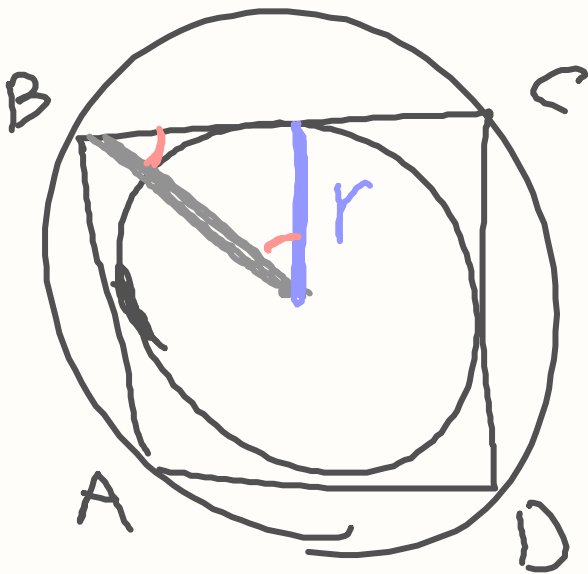
$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$x_2 = 0 \quad y_2 = 4$$

$$x_1 = -1 \quad y_1 = 3$$

$$d = \sqrt{(0 - (-1))^2 + (4 - 3)^2} = \sqrt{1^2 + 1^2} = \sqrt{2}$$

39.



ABCD-SQUARE

AREA OF OUTER
CIRCLE - 200π

FIND AREA OF THE
SMALL CIRCLE!

$$A = \pi R^2 ; R^2 = \frac{A}{\pi}$$

$$R = \sqrt{\frac{A}{\pi}}$$

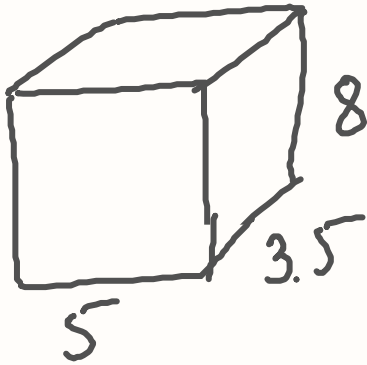
$$r = \frac{R}{\sqrt{2}} = \frac{\sqrt{\frac{A}{\pi}}}{\sqrt{2}}$$

$$r = \frac{\sqrt{\frac{A}{\pi}}}{\sqrt{2}}$$

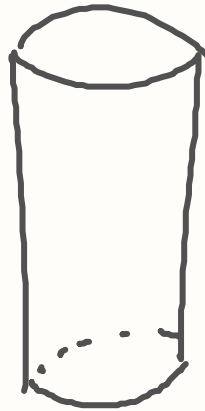
$$A = \pi r^2$$

$$A = \pi r^2 = \pi \frac{\frac{A}{\pi}}{2} = \frac{A}{2}$$

40.



$$V = 5 \cdot 3.5 \cdot 8$$



$$\begin{aligned} V &= \pi R^2 \cdot h = \\ &= 3.14 \cdot 2.5^2 \cdot 8 \end{aligned}$$

41. $V_{\text{sphere}} = 1500\pi \text{ in}^3$

SURFACE AREA?

$$V = \frac{4}{3} \pi R^3$$

$$A = 4\pi R^2$$

$$3V = 4\pi R^3$$

$$R^3 = \frac{3V}{4\pi}$$

$$R = \left(\frac{3V}{4\pi} \right)^{\frac{1}{3}}$$

$$\wedge (1 \div 3)$$